

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Delhi Compressor Station
Agency Interest No.: 32752
CenterPoint Energy Gas Transmission Company
Holly Ridge, Richland Parish, Louisiana
Draft Permit 2460-00003-V3**

I. APPLICANT:

Company:

CenterPoint Energy Gas Transmission Company
1111 Louisiana Ave.
Houston, TX 77002

Facility:

Delhi Compressor Station
2 miles Southeast of Holly Ridge, Richland Parish, Louisiana
Approximate UTM coordinates are 631.876 kilometers East and 3591.517
kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

Delhi Compressor Station is an existing natural gas compressor station that currently operates under Permit No. 2460-00003-V2 issued January 31, 2007. The facility is owned by CenterPoint Energy Gas Transmission Company formerly Reliant Energy Gas Transmission Company.

This is the Part 70 operating permit renewal/modification for the facility.

III. PROPOSED PERMIT / PROJECT INFORMATION:

Proposed Permit

A permit application and Emission Inventory Questionnaire dated July 23, 2009, were submitted by CenterPoint Energy Gas Transmission Company requesting a Part 70 operating permit renewal/modification.

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Project description

The Delhi Compressor Station compresses natural gas via two compressor engines, rated at 3,300 horsepower and 2,200 horsepower, respectively.

Permitted Air Emissions

Estimated changes in permitted emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	4.39	6.49	+ 2.10
SO ₂	0.13	0.11	- 0.02
NO _x	138.92	127.66	-11.26
CO	235.72	205.16	-30.56
VOC *	67.64	57.75	- 9.89

VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
Benzene	0.215	0.37	+0.155
Toluene	0.101	0.21	+0.109
Ethylbenzene	<0.001	0.03	+0.03
Xylenes	<0.001	0.03	+0.03
n-Hexane	0.02	0.08	+0.06
Methanol	0.323	0.43	+0.107
Acetaldehyde	1.04	1.32	+0.28
Acrolein	0.96	1.33	+0.37
Formaldehyde	7.17	9.38	+2.21
Total TAPs	9.829	13.18	+3.351
Other VOC's	57.811	44.57	-13.241

Prevention of Significant Deterioration Applicability

This permit was reviewed for compliance with 40 CFR 70 and the Louisiana Air Quality Regulations. Prevention of Significant Deterioration (PSD), New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP) do not apply.

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MACT requirements

This facility is a minor source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

Air Modeling Analysis

No dispersion modeling was performed.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

Regulatory Analysis

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit.

IV. Permit Shields

There is no permit shield.

V. Periodic Monitoring

The Nitrogen Oxide, Carbon Monoxide and Oxygen stack gas concentrations of the compressor engines will be monitored by a portable analyzer semiannually.

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VI. Applicability and Exemptions of Selected Subject Items		
ID No:	Requirement	Notes
EQT 1 and 2 Compressor Engines	40 CFR 60 Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	DOES NOT APPLY Engines are rated greater than 500 hp and were manufactured prior to July 1, 2007.
	40 CFR 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	DOES NOT APPLY Existing engines located at an area source.

VII. Streamlined Requirements			
Unit or Plant Site	Programs Being Streamlined	Stream Applicability	Overall Most Stringent Program
Delhi Compressor Station	None		

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VIII. Glossary

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

Carbon Monoxide (CO) - A colorless, odorless gas which is an oxide of carbon.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Disulfide (H₂S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

New Source Review (NSR) - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to

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ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.